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Patent Application

Application #: 10/707,091
Group Art Unit # 2859
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Examiner: R. Alexander Smith
Title: Teaching Sin and Cosine Instrument

Amendment to Abstract of Disclosure

1) The abstract of disclosure has been shortened to less than 150 words and to fit on one page as requested in the office action.

The amendments includes no new matter that was not disclosed in the original specifications.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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Abstract of Disclosure

[0018] A device that teaches the relationship between a right triangle, the length of its hypotenuse, the length of its two sides and the trigonometric functions. The device includes a horizontal and vertical ruler attached by a sliding attachment bracket. A circular plate showing 360 degrees (θ) ~~of the circle~~ is attached to the horizontal ruler along with a pivoting ruler that can rotate 360 degrees ~~around the circular plate~~. By sliding the vertical ruler ~~to different positions~~ along the horizontal ruler and revolving the pivoting ruler ~~to different angles (θ)~~, the height of the vertical ruler (Y) where it intersects the pivoting ruler, the length of the horizontal ruler (X) where it intersects the vertical ruler, and the length of the of the pivoting ruler (R) where it intersects the vertical ruler can be measured. The trigonometric functions can then be calculated and plotted by their relationship with the measured values of X, Y, R and θ. ~~For example, sin θ = Y / R and cosine θ = X / R. The sin and cosine functions and other trigonometric functions can be calculated and plotted (e.g. θ vs. Y/R) by varying the position of the rulers with respect to each other.~~